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NEW SPECIES OF PLANTS
FROM BAJA CALIFORNIA, MEXICO

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Five new species of flowering plants native in Baja California are described in this paper. The first three were collected during field trips financed by the Belvedere Scientific Fund, through the generosity of its founder and president, Mr. K. K. Bechtel.

One of the other two, a species of *Encelia*, was collected by Dr. Peter H. Raven, who provided me with field notes and his personal evaluation of the taxon and permitted me to study and describe it. The new species of *Tanacetum* was collected nearly twenty years ago while on a field trip into the Sierra San Pedro Martir with Dr. Albert M. Vollmer, who financed the expedition and personally helped with the chores of collecting and pressing specimens during our stay in the field. It is a real pleasure to acknowledge the help extended by these gentlemen and to thank them, individually and collectively, for their interest, aid, and encouragement.

The types of the species here described are deposited in the Dudley Herbarium at Stanford University, California.

Dalea bechtelii Wiggins, sp. nov.

(Plate 13, figures 1-9.)

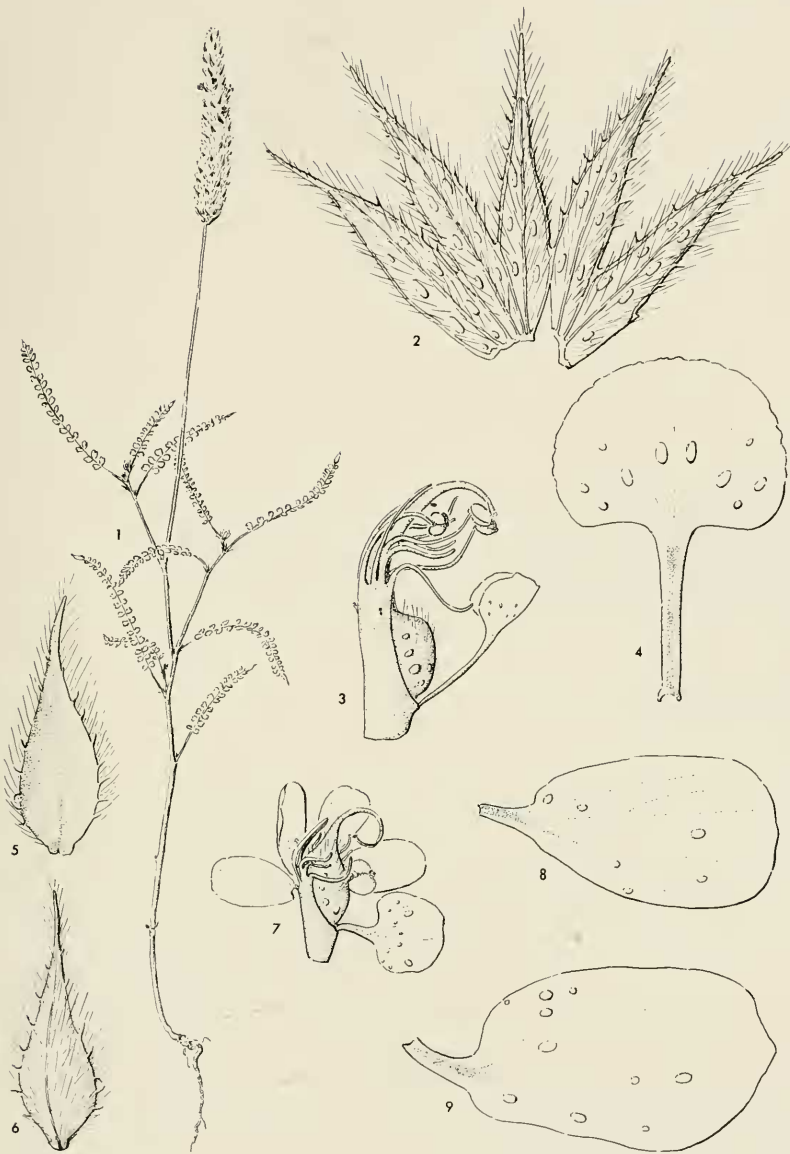
Planta annua, erecta vel 2-6 ramis ascendentibus, 1-3.5 dm. alta, inflorescentibus exceptis glaber leviter glaucaque; ramis teretibus, gracilibus, 0.5-1.5 mm. diametro; foliis imparipinnatis, 2.5-4 mm. latis, 2-6 cm. longis, foliolis 21-41, lateralibus oppositis, orbicularibus vel late obovatis, integris vel apice emarginatis, 1-2 mm. longis, crassis, foliolo terminali liberi, lanceolato, 2-5 mm. longo, apice acuto, basi rotundato; stipulis subulatis, 1.5-2.5 mm. longis, fragilibus, caducis; inflorescentibus terminalibus spiciformibus, sub fructu 1-6 cm. longis, 6-8 mm. diametro, dense hirsutis, bracteis lanceolato-ovatis, 1-1.5 mm. longis, inter glabris, extus hirsutis et 6-10 glandulos ellipticos ferens; calyce 5-lobata, lobis anguste lanceolatis vix 4 mm. longis, attenuatis, extus hirsutis glandulosisque; petalis caeruleis, caducis, vexillo flabelliformi, 2 mm. longo, basi tubo staminum inserto; petalis alarum carinarumque circa apice tubo staminum insertis; staminibus 9, equalibus; fructu 2.5-3 mm. longo, parce hirsuto glandulosisque; semine solitario.

Slender, ascending to erect annual 1-3.5 dm. tall, glabrous, slightly glabrous, slightly glaucous; stems 0.5-1.2 mm. in diameter, often somewhat zigzag, internodes 1-3.5 cm. long; flowering scape to 1 dm. long; leaves lance-linear in outline, pinnately compound, 2.5-4 mm. wide, 2-6 cm. long; petiole slender, 5-25 mm. long; leaflets 10-20 pairs, plus a longer, lanceolate, terminal one, lateral leaflets orbicular to broadly obovate; 1-2 mm. long, entire or faintly emarginate, glabrous, subsessile; terminal leaflet linear-lanceolate, 2-5 mm. long, acute; rachis bearing a circular, subpunctate, dark reddish to nearly black gland between each of the lower 3-8 pairs of lateral leaflets; stipules narrowly subulate, 1.5-2.5 mm. long, reddish to brownish, fragile; inflorescence a dense, spike-like raceme 1-6 cm. long, 6-8 mm. in diameter, with many crowded flowers, each flower axillary to a narrowly lance-ovate, caducous, green, densely hirsutulous bract 1-1.5 mm. long, its margins beset with several reddish, subulate, gland-tipped teeth; pedicels yellowish, about 0.5 mm. long; calyx about 4 mm. long, equally and deeply 5-lobed, the lobes linear-lanceolate, hirsute externally, with 6-10 elliptic to linear yellowish glands more or less paired between the costa and the margins of each lobe, toothed like the bracts; corollas blue near tips of petals, whitish or cream

PLATE 13

Figures 1-9. *Dalea bechtelii*, sp. nov.

Figure. 1. Habit of plant, $\times \frac{1}{2}$. Figure 2. Calyx, split and spread out, $\times 10$. Figure 3. Staminal tube, ovary, and banner, $\times 10$. Figure 4. Banner, $\times 25$. Figure 5. Bract, adaxial surface, $\times 10$. Figure 6. Bract, abaxial surface, $\times 10$. Figure 7. Flower, with calyx removed, $\times 10$. Figure 8. Wing petal, $\times 25$. Figure 9. Keel petal, $\times 25$.



near the base; banner flabelliform, inserted at base of staminal tube, its claw about 1.5 mm. long, blade 1.2-1.4 mm. wide, about 1 mm. long, with 8-12 circular to oblong glands evenly distributed across the lower one-half of the blade; wings and keel petals inserted near apex of staminal tube, short-clawed, blue, gland-dotted; stamens 9 (rarely 10), nearly equal, curved upward around style; legume 1-seeded, indehiscent, about 2.5-3 mm. long, sparingly hirsute, gland-dotted near both dorsal and ventral sutures; seeds brownish, smooth and shining, 1.2-1.5 mm. long.

HOLOTYPE. On rocky slopes at Santispaquis Cove, Bahía de la Concepción, Territorio del Sur, Baja California, Mexico, *Ira L. Wiggins* and *Dorothy B. Wiggins*, 17,985, 18 October, 1962 (Dudley Herbarium, Stanford University, No. 508,795).

In the keys in the *Flora of the Sonoran Desert* this species would key out to *Thornbera pringlei*, but that species is perennial, has much more conspicuously glandular-punctate leaflets, and larger flowers. *Dalea bechtelii*, furthermore, has considerably smaller leaflets and much smaller bracts than one finds in *T. pringlei*.

It is a great pleasure to name this beautiful little *Dalea* in honor of Mr. Kenneth K. Bechtel, whose interest in the plants and birds of Baja California has lead him to support a number of field expeditions into the peninsula, and to finance publication of the results of many papers dealing with the area's biota.

Euphorbia taluticola Wiggins, sp. nov.

(Plate 14, figures 1-17.)

Planta annua, repens, tota pilis albidis puberulentibus; caulibus ramulisque gracilibus, 0.6-1.5 mm. diametro, 5-25 cm. longis; internodiis 0.5-3 cm. longis; stipulis interpetiolaribus, minutis; foliis anisomeris, oblongis rotundatisve, rubro-maculatis, cum petiolo vix 0.4 mm. longo; cyathiis subsolitariis, ob internodi a abbreviata sub apices sat congestis, anguste, campanulatis vix 1.5 mm. longis, albidis puberulentibus; glandulis 4, reniformibus, 0.3-0.4 mm. latis, purpurescentibus vel nigrescentibus, exappendiculatis; staminibus 8-32; ovario rotundato-ovato, 1.2-1.8 mm. longo, hispidulo, deflexo, albicante; capsula 1.8-2 mm. longa, tota puberulenta; semine carinato-ovoideo, 0.8 mm. longo, maturo pallide brunneo-rubicundo, facie quisque cum 3-4 foveis minutis.

Prostrate annual from a slender taproot 5-20 cm. long; branches 5-25 cm. long, 0.6-1.5 mm. in diameter, branching at most of the nodes; internodes to 3 cm. long; stipules lance-acicular, about 0.5 mm. long, obscured by white, coarse, subappressed hairs; petioles very short, mostly 0.2-0.4 mm. long, rarely to 1 mm. long; leaf blades subfleshy, broadly oblong, 2.5-4 (6) mm. wide, 3-8 (12) mm. long, markedly reddish purple and bearing a median spot

and several to many small, dark reddish to liver-colored spots on the upper, or both surfaces, moderately puberulent with subappressed, white, obliquely curved hairs 0.2-0.3 mm. long; base of blade asymmetrical; cyathia usually solitary, each on a short, stoutish peduncle, obovoid, about 1.5 mm. long at anthesis, densely appressed-puberulent with shining, white, relatively coarse hairs similar to those on the leaves, but more closely crowded; glands 4, narrowly reniform, about 0.4 mm. wide, without appendages, very dark purple to nearly black, often slightly crateriform; ovary ovoid, 1.2-1.8 mm. long, densely white-puberulent, conspicuous, early exserted, bent downward sharply on a pedicel slightly exceeding the cyathium; stamens in 2-4 groups of 4-8 in each group, about equaling or barely exceeding the lip of the cyathium, 1-3 narrowly lanceolate bracts 0.6-0.8 mm. long inserted at base of each group of stamens; capsule ovoid, about 2 mm. long, reddish, pubescent; seeds ovoid, about 0.8 mm. long, acute at the apex, obscurely triangular in cross section, with 3-4 rows of shallow pits encircling each seed, the testa reddish brown, microscopically papillate, not becoming gelatinous when wetted.

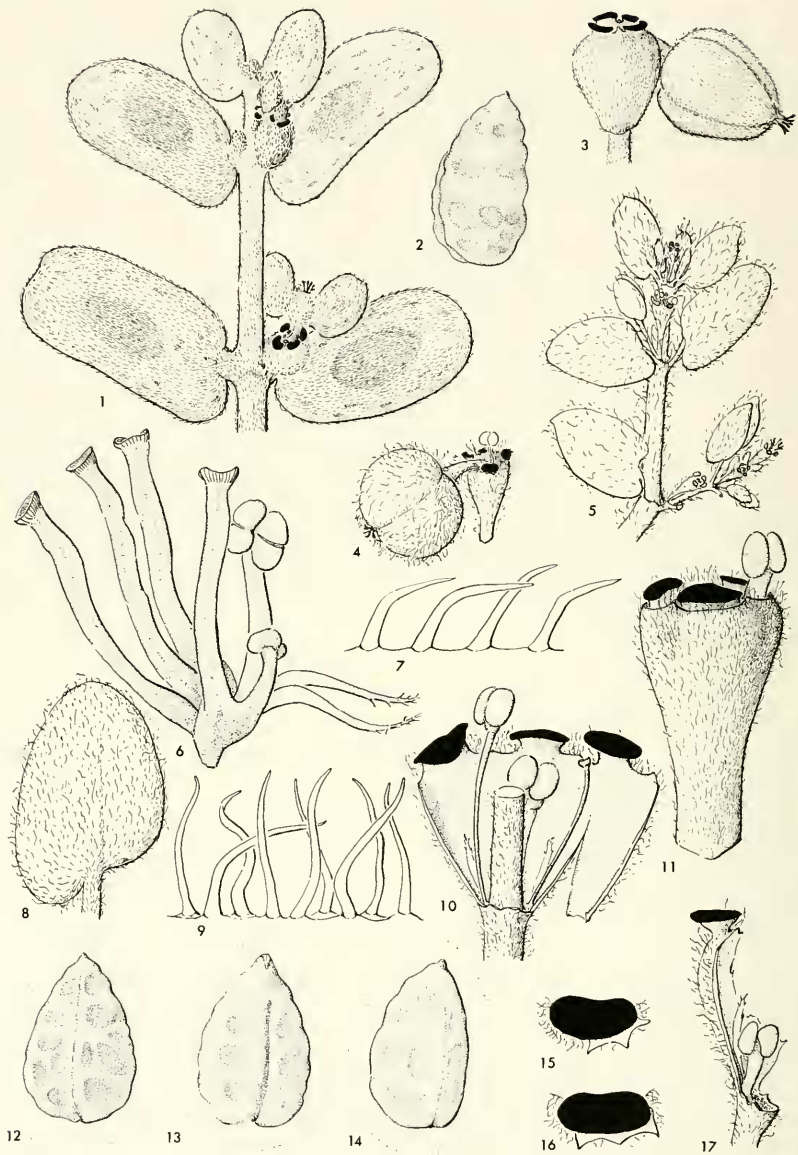
HOLOTYPE. Talus slope about 1 mile east of Punta San Ignacio, east of Punta San Ignacio, east shore of Bahía de la Concepción, Territorio del Sur, Baja California, Mexico, *Ira L. Wiggins* and *Dorothy B. Wiggins*, 18,036, 19 October 1962 (Dudley Herbarium, Stanford University, No. 508,796).

Similar to *Euphorbia petrina* S. Watson, but differing from that species in its larger, oblong instead of ovate leaves (Compare plate II, figure 1 with figures 5-6); in the coarser, simply curved instead of crinkly hairs (plate II, figures 1, 3, 4); in the absence of appendages on the involucre glands (some glands in *S. petrina* bear small appendages; see plate II, figures 15-16); in the larger number of stamens in each group and in the whole cyathium in *E. taluticola*; and in the absence of gelatinous sheaths around the seeds when wet in *E. taluticola* (plate II, figure 2) in comparison with the conspicuous gelatinous sheath developed when seeds of *E. petrina* are moistened (plate II, figures 12, 13). The peculiar color and spotting on the leaves of *E. taluticola* is striking, although probably of little or no significance in this group of species.

Cynanchum mulegensis Wiggins, sp. nov.

(Plate 15, figures 1-11.)

Suffrutex volubilis gracilis, caulibus 0.5-2 mm. crassis, tamdiu 5 m. longis pallido-viridibus vel purpurecentibus pallido-glaucisque; ramis novellis 0.5 mm. crassis, parce hirsuto-puberulentibus mox glabris; foliis oppositis, linearibus, deflexis, 0.5-2 mm. latis, 2-5 cm. longis, parce hirsutis mox glabris, cum odore injucundo; floribus solitariis, vel 2-3 in pedunculo brevi, pediculis gracilibus, 1.5-3 mm. longis, sub fructu 2-5 mm. longis; calyce 5-lobato, lobis ovatis, acutis vel breve attenuatis; lobis corollae lanceolatis, 1-1.5 mm.



latis, 4-5.5 mm. longis, virido-luteis, margine virido-brunneis, toto glabris; corona 5-lobata, lobis subcarnosis, erectis, albido-luteis vix 2 mm. altis; appendicibus staminum incurvis ovatis, 0.2 mm. latis longisque, hyalinis; corpatro-purpurascens; folliculis fusiformibus, 6-8 mm. crassis, 8-22 cm. longis, pallide viridibus, brunneo-purpurascens maculatis, glabris; seminibus 1.5-2 mm. latis, 6-7 mm. longis; coma argenteo-alba, ca. 3 cm. longa.

A slender, twining vine forming dense masses over rocks and shrubs; stems to 5 m. long, dying back almost to the ground in unfavorable seasons; branches 0.5-1 mm. in diameter, pale green to purplish, faintly glaucous, sparsely hirsutulous when young but soon glabrate; internodes 3-6 cm. long; leaves opposite, linear, 0.5-2 mm. wide, 2-5 cm. long, sparsely hirsutulous, soon glabrate, slightly to strongly deflexed, all herbage with a strong, unpleasant odor when crushed; flowers solitary or sometimes 2-3 on an axillary peduncle, the latter about 1 mm. long, subtended by a linear-lanceolate bract about as long as the peduncle; pedicels slender, 1.5-3 mm. long at anthesis, 2-5 mm. long in fruit; calyx shallowly cup-shaped, 5-lobed, 2-3 mm. in diameter, the lobes ovate, acute to short-attenuate, 1-1.5 mm. long, sparsely appressed-hirsutulous, soon glabrate; corolla lobes ascending-spreading, lanceolate, 1-1.5 mm. wide, 4-5.5 mm. long, pale yellow, tinged along margins and on outer surface with greenish brown, glabrous; corona 5-lobed, subfleshy, erect, yellowish, about 2 mm. high, one-fourth as wide; anthers united into a conical columella about 1.5 mm. in diameter at the base, 1.8-2 mm. high; appendages alternating with the corpusculi, incurved over the columella, ovate, about 0.2 mm. wide, slightly longer than wide, hyaline; corpusculi erect, dark purple to black, attached to pollinia by translators attached about one-third of the distance from base to apex of corpusculum, slanting downward slightly to the broadly obloid pollinia; follicles slenderly fusiform, 5-6 mm. in diameter, 8-12 cm. long, pale green, irregularly maculate with purple or brownish purple, glabrous; seeds strongly flattened, 6-7 mm. long, 1.5-2 mm. wide, truncate; coma silvery white, silky, about 3 cm. long.

PLATE 14

Figures 1-17. *Euphorbia taluticola*, sp. nov., and *Euphorbia petrina* S. Watson.

Figures 1-3; 6, 7. *Euphorbia taluticola*. Figure 1. Flowering branch, dorsal surface, $\times 5$. Figure 2. Seed, $\times 50$. Figure 3. Cyathium with young fruit, $\times 10$. Figure 6. Staminate flowers, $\times 25$. Figure 7. Hairs from surface of leaf, $\times 50$.

Figures 4, 5; 8-17. *Euphorbia petrina*. Figure 4. Cyathium with ovary and stamen, $\times 10$. Figure 5. Flowering branch, dorsal surface, $\times 5$. Figure 8. Leaf, $\times 7\frac{1}{2}$. Figure 9. Hairs from surface of leaf, $\times 50$. Figure 10. Involucre split to show stamens, $\times 25$. Figure 11. Cyathium and 1 stamen, $\times 25$. Figures 12-14. Dorsal, ventral, and lateral views of seed, with gelatinous coat that develops when moistened, $\times 25$. Figures 15, 16. Glands and appendages, $\times 30$. Figure 17. Part of involucre of cyathium and staminate floret, $\times 25$.

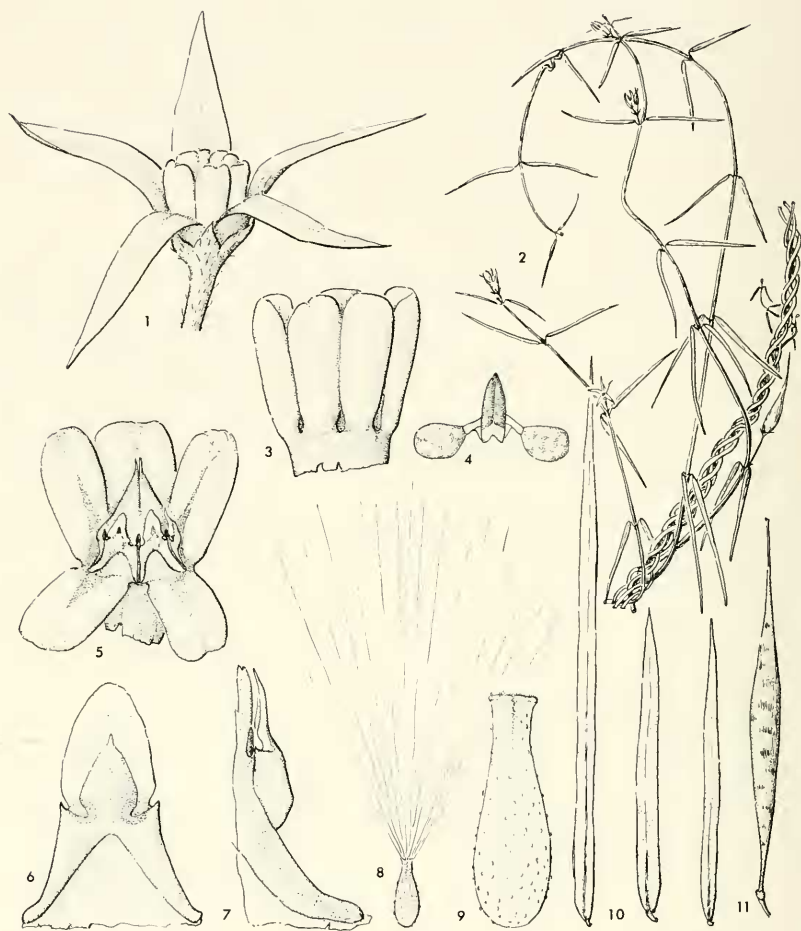


PLATE 15

Figures 1-11. *Cynanchum mulegensis*, sp. nov.

Figure 1. Flower, $\times 5$. Figure 2. Habit of plant, $\times \frac{1}{2}$. Figure 3. Corona detached from rest of flower, $\times 10$. Figure 4. Pollinia and translators, $\times 50$. Figure 5. Interior of flower with nearer corona lobes turned downward, $\times 10$. Figure 6. Segment of columella and appendage, dorsal view, $\times 25$. Figure 7. Segment of columella and appendage, lateral view, $\times 25$. Figure 8. Seed and coma, $\times 1\frac{1}{2}$. Figure 9. Seed without coma, $\times 5$. Figure 10. Representative leaves, $\times 1\frac{1}{2}$. Figure 11. Mature follicle, $\times \frac{1}{2}$.

HOLOTYPE. On shrubs and clambering over rocks just below lighthouse, at mouth of Estero Mulegé, Territorio del Sur, Baja California, Mexico, *Ira L. Wiggins* and *Dorothy B. Wiggins*, 18,085, 21 October 1962 (Dudley Herbarium, Stanford University, No. 508,797).

This is unlike any other *Cynanchum* known to me. A few years ago I would have placed it in *Metastelma*, but since Woodson and Holm have investigated a number of the milkweeds and combined several groups once considered distinct genera, I defer to their judgement and place it in *Cynanchum*. *Cynanchum mulegensis* is unusual in having completely glabrous corolla lobes, in the size of the flowers, which are considerably larger than most of those in the old *Metastelma* group, and in the very narrow, strongly deflexed leaves.

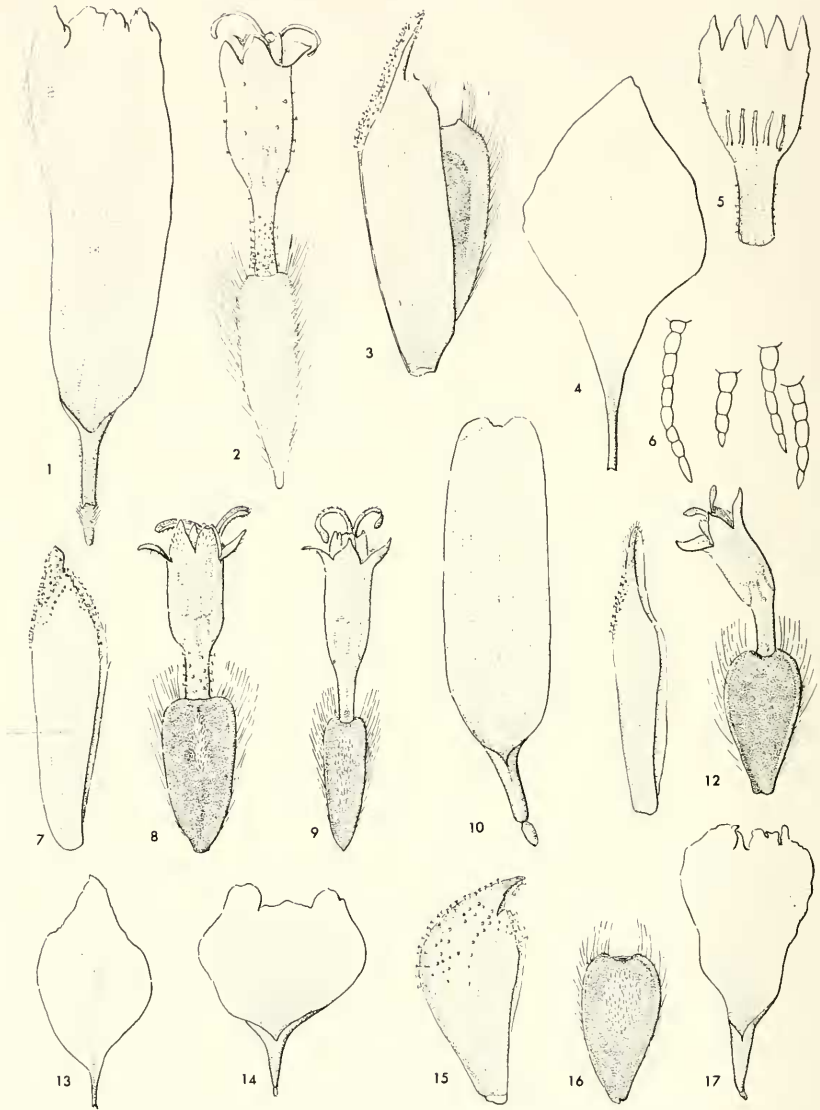
It seems appropriate to name it for the pleasant Mexican village near which the type collection was made.

Encelia ravenii Wiggins, sp. nov.

(Plate 16, figures 1-6.)

Frutex rotundatus, 2-6 dm. altus, ramis procumbentibus 2-6 dm. longis ad apicem dense foliatis, ramis novellis dense lanato-tomentosis; foliis numerosis, petiolis gracilibus, 1-1.5 cm. longis, lamina ovata, 1-3 cm. lata, 2-4.5 cm. longa, trinervia, acuta, basi late cuneata vel rotundata, margine integra, minute albido-pubescenti, maturata minute puncticulato-glandulosa; pedunculo 1.2-2 mm. crassa, basi glabra sub capitula glanduloso-puberulenti, 1-2.5 dm. alto; capitulis ad apicem ramorum solitariis; involucri 1.5-2.5 cm. diametro, 10-12 mm. alto; phyllaribus 3-4 seriatis, 1-2 mm. latis, lanceolato-attenuatis, valde curvatis, marginibus basi dense stipitato-glandularibus, parce pilosis, exterioribus 5-7 mm. longis, intermediis gradatim imbricatis, intimis 12-15 mm. longis, apice acutis vel attenuatis, omnibus margine leviter ciliatis; paleis receptaculis numerosis, naviculatis, 1.5-2 mm. latis, 7-8 mm. longis, carina glanduloso-puberulenti; floribus ligulatis 15-20, ligulis albis, 5-6 mm. latis, 2-2.5 cm. longis, apice vadosae trifidis, intus glabris, extus lamina tubique parce stipitato-glandularibus, tubo 3.5-4 mm. longo; seminibus florum ligulorum abortivis; floribus discoideis numerosis, actinomorpha, flavis, tubo 1.2-1.5 mm. longo, lobis ovalis, acutis, atroflavis; achaenia brunnei vel fusca, oblongo-ovata, 1.5-2.5 mm. lata, 5-6 mm. longa, marginibus valde hispidis, pilis erectis; pappi nullo.

Low, rounded semishrub 2-6 dm. tall, with spreading to procumbent branches 2-6 dm. long, cinereous with closely appressed, dense puberulence of simple, white hairs; tips of branches turned upward, each terminated by a simple scape 1-2.5 dm. tall; leaves numerous, crowded near tips of branches, petioles slender, 1-1.5 cm. long, blades broadly ovate, 1-3 cm. wide, 2-4.5 cm. long, broadly cuneate at the base, acute at the apex, prominently 3-nerved,



minutely and densely appressed-puberulent, whitish on both surfaces, numerous small, globular, golden-yellow glands showing through puberulence in age; scapes 1.2-2 mm. in diameter, finely glandular-puberulent on the upper one-fourth to one-third, glabrate or nearly so below, stramineous to reddish in youth; involucre low-hemispherical, 1.5-2.5 cm. in diameter at anthesis, 10-12 mm. deep; involucre bracts dark green, in 3-4 series, narrowly lanceolate-attenuate, 1-2 mm. wide, outermost 5-7 mm. long, progressively longer, innermost 12-15 mm. long, strongly curved, their margins ciliate-pubescent near the base, densely glandular with sessile to stipitate glands, and with a few coarse, whitish hairs scattered near base; ray florets about 15-20, ligules spreading, white to pale cream, 5-6 mm. wide, 2-2.5 cm. long, 10-nerved, irregularly and shallowly trifid at the apex, glabrous on the inner surface, sparsely stipitate-glandular on the outer surface and along the veins of the slender tube, the latter 3.5-4 mm. long; ray achenes abortive, triangular in cross section, 2-3 mm. long, closely hirsute on the angles, hirsutulous along midline of outer face, glabrous on inner face; chaffy bracts subtending disk florets naviculate, 7-8 mm. long, 1.5-2 mm. wide from back to front, slightly attenuate above, glabrous on the lateral faces, glandular-puberulent on terminal part of keel, yellowish; disk florets many, tube 1.2-1.5 mm. long, broadening abruptly into the tubular throat, this 3-4.5 mm. long, pale cream; corolla lobes of disk florets 5, ovate, acute, 0.5-0.7 mm. long, deep yellow, spreading only slightly at anthesis, markedly thicker than tissue of throat, microscopically papillate along the edges; tips of anthers cartilaginous, erect, narrowly triangular-ovate, acute, dark yellow; style branches narrowly oblanceolate, about 1.5 mm. long, sparsely hispidulous with stiff, blunt hairs along the inner face, stipitate-glandular elsewhere; achenes very thin, pale yellowish brown at maturity, oblong-obovate, 1.5-2.5 mm. wide, 5-6 mm. long, with a fringe of upward-

PLATE 16

Figures 1-17. *Encelia ravenii*, sp. nov. and other species.

Figures 1-6. *Encelia ravenii*. Figure 1. Ray floret, $\times 2\frac{1}{2}$. Figure 2. Disc floret, $\times 5$. Figure 3. Receptacular bract, partially enclosing achene, $\times 5$. Figure 4. Leaf, $\times 1$. Figure 5. Disc corolla split and spread open (anthers removed, but filaments in place). $\times 5$. Figure 6. Hairs from abaxial surface of ligule, $\times 50$.

Figures 7-8. *Encelia virginensis* var. *actonii*. Figure 7. Receptacular bract, $\times 5$. Figure 8. Disc floret, $\times 5$.

Figures 9-11. *Encelia californica*. Figure 9. Disc floret, $\times 5$. Figure 10. Ray floret, $\times 5$. Figure 11. Receptacular bract, $\times 5$.

Figures 12-17. *Encelia farinosa*. Figure 12. Disc floret, $\times 5$. Figure 13. Leaf, $\times 1$. Figures 14, 17. Ray florets, $\times 2\frac{1}{2}$. Figure 15. Receptacular bract, $\times 5$. Figure 16. Achene, $\times 5$.

ly pointing stiff hairs along each margin, faces sparsely beset with slender hairs near the mid line; pappus none.

HOLOTYPE. Rocky wash 16.5 miles north of San Felipe, Baja California del Norte, Mexico, *Peter H. Raven*, 14,788, 22 February 1960 (Dudley Herbarium, Stanford University, 508,798).

Encelia ravenii is similar in habit to *E. californica*, but its leaves are larger and more densely white-puberulent than those of *E. californica*. It is distinctive in its dense, procumbent habit, the crowding of the leaves at or near the tips of the branches; in having white rays (which turn cream in drying) that at 2-2.5 cm. long (fully twice as long as average rays in *E. farinosa* ---compare plate 16, figure 1, with figures 14, 17); in having stipitate glands intermingled with glandless hairs on the abaxial surface of the ligules of the ray florets. It differs from *E. californica* further in having non-branching scapes, each of which bears a solitary head, and in having yellow instead of purplish disk florets. It resembles *E. virginensis* subsp. *actonii* in the 1-headed scapes, but differs from that taxon in having more silvery leaves, slightly larger, more acute receptacular bracts, and considerably longer and more slender disk florets and achenes (compare plate 16, figure 2 with figure 8).

***Tanacetum martirensis* Wiggins, sp. nov.**

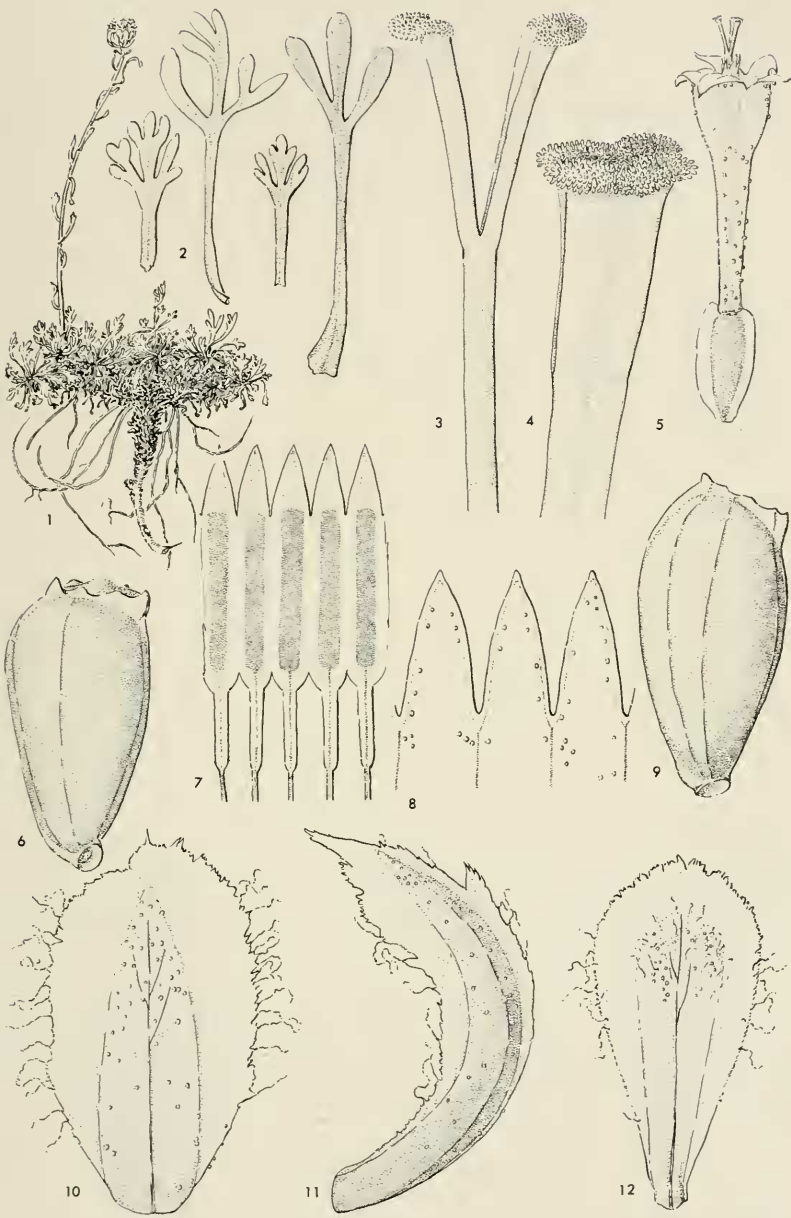
(Plate 17, figures 1-12.)

Herba perennis, radice simplice vel ramoso, ramulis paucis vel numerosis, prostratis, 1-5 cm. longis; foliis ad apice ramulis brevis congestis, flabelliformibus, 1.2-4 cm. longis, prope apicem utroque 1-5 lobatis, lobis oblongis, 1-2 mm. latis, 1.5-8 mm. longis, cinereo-hispidulis; capitula discoidea ad apice rami solitaria; involucri 7-12 mm. diametro, 5-7 mm. alto, late campanulato; phyllaribus 3-4 seriatis, 1.4-2.2 mm. latis, 4-6 mm. longis, apice rotundatis vel acutis, externis dorso viridibus vel brunneis, parce veldense hirsutulosus, glandularibus, intimis basi glabris eglandularibusque; corolla 4.5-5 mm. longa, faucibus 1.2-1.4 mm. diametro, parce irregulariter glandularibus, tubo gracile, lobis atro-flavis; achaenia ca. 2 mm. longa, leviter 5-costata, rubro-brunnea, glabra; pappo nullo.

PLATE 17

Figures 1-12. *Tanacetum martirensis*, sp. nov.

Figure 1. Habit of plant, $\times \frac{1}{2}$. Figure 2. Representative leaves, $\times 1\frac{1}{2}$. Figure 3. Upper part of style and stigma lobes, $\times 25$. Figure 4. Stigma lobes, $\times 50$. Figure 5. Disc floret (stippled halo represents gelatinous sheath when moistened), $\times 10$. Figures 6, 9. Achenes, $\times 25$. Figure 7. Anther tube, split and flattened, $\times 25$. Figure 8. Tip of corolla lobes, $\times 50$. Figure 10. Outer surface of exterior involucrial bract, $\times 10$. Figure 11. Lateral view of same, $\times 10$. Figure 12. Outer surface of interior involucrial bract, $\times 10$.



Small perennial herb from a stout, slightly branched or simple taproot, which given rise to several to many prostrate-spreading branches, each of these bearing a cluster of canescent, pinnately lobed leaves, each plant forming a cushion 5-10 cm. in diameter, and made up of several vegetative rosettes; leaves flabelliform in outline, 1.2-4 cm. long, lobed into 3-8 oblanceolate or oblong divisions 1-2 mm. wide, 1.5-8 mm. long, all lobes on the upper one-third or one-half of the leaf, canescent with relatively coarse, simple hairs 1 mm. long or less; scapes borne singly from 1-several rosettes, erect, slender, 5-10 cm. tall, bearing alternate, simple, oblanceolate leaves 5-15 mm. long, apex of scape sparsely canescent to nearly glabrate in age; flowering heads hemispherical, 5-7 mm. high, 7-12 mm. wide at anthesis; involucre bracts in 3-4 series, imbricated, 4-6 mm. long, 1-4-2.2 mm. wide, greenish to brownish along midrib, broadly fringed with thin, hyaline, silvery to roseate wings, these erosulate and sparsely ciliate along the margins, otherwise nearly glabrous, or the thicker, middle part sparsely to moderately pubescent with crinkly hairs and beset with sessile or subsessile glands, glabrous and eglandular below on the inner bracts; receptacle naked; ray flowers very few or lacking, when present differing from the disk florets only in having 3-4 instead of 5 teeth, pistillate and fertile; disk florets orange, 4.5-5 mm. tall (including achene) 1.2-1.4 mm. in diameter at anthesis, bearing scattered, subsessile, globose glands on tube and in irregular patches at bases of corolla lobes; tube slender, about twice as long as the funnel form throat, lobes bright orange; anther tube slender, about 1.2 mm. long, the apical appendages acute, horny; style branches about twice as broad as thick, 0.2 mm. wide, 0.5 mm. long, truncate, tips bearing short, blunt papillae; achenes of disk florets obovoid, about 2 mm. long, faintly 5-ribbed, smooth and glabrous, dark reddish-brown, with an obscurely toothed ring at the apex, producing a thick, transparent, gelatinous sheath nearly as wide as the diameter of the achene when wetted; pappus none.

HOLOTYPE. At summit of rim just north of Picacho de la Encantada, overlooking San Felipe Desert, altitude 9,200 feet, Sierra San Pedro Martir, Baja California del Norte, Mexico, *Ira L. Wiggins*, 11,277, 18 October 1946 (Dudley Herbarium, Stanford University, No. 321,859).

The monocephalic scapes arising from nearly flat rosettes suggests *Tanacetum simplex* A. Nelson, (*Sphaeromeria simplex* Rydberg), but the divided leaf blades and broader involucre bracts readily separate it from the Wyoming species. *Tanacetum martirensis* resembles *T. compactum* Hall (*Chamartemis compacta* Rydberg), but the epappose achenes and smaller disk florets separate our plant from *T. compactum*, which occurs in the Charleston Mountains, Nevada. The gelatinous sheath around the moistened achene suggests a relationship with *T. potentilloides* A. Gray (*Vesicaria potentilloides* Rydberg), but our plant has simple, unbranched flowering scapes, and a disk floret that is totally different in several minute structural characteristics from those of *T. potentilloides*.